undercarriage disposed below the bed" on **lines 8 and 9**, replace "aperture therebelow" with --bed-- on **line 13**, and delete "with the undercarriage straddling said lower pole of the magnet" on **lines 14 and 15**:

22. A method for positioning a patient for MRI using an NMR polarizing magnet having opposed upper and lower horizontal poles defining an MRI image volume within an open gap between the poles that is open on at least three sides, the method comprising:

at a location completely displaced from the upper and lower horizontal poles, placing said patient on a movable bed;

moving said bed into juxta-position with said open gap; and

continuing to move said bed into said open gap while moving said bed over a face of the lower pole, thus leaving unobstructed adjacent access to the patient along an entire patient body side while the patient is disposed in said open gap.

REMARKS

This amendment is responsive to the Board's Decision on Reconsideration mailed June 13, 2000. Re-examination and reconsideration of the application are respectfully requested.

The Office Action

Claims 1-13 stand allowed.

Claims 14-17 stand rejected under 35 U.S.C. §251 and, alternatively, under 35 U.S.C. §112, first paragraph.

Claims 14-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Matsutani (U.S. Patent No. 4,875,485) in view of LeVeen (U.S. Patent No. 4,230,129).

35 U.S.C. §251 and 35 U.S.C. §112, First Paragraph

Applicants have canceled **claims 14-17**. Furthermore, applicants have carefully amended **claims 18-22**, which were first presented in Amendment C (filed May 22, 2000), to avoid any potential rejections under 35 U.S.C. §251 and/or 35 U.S.C. §112, first paragraph.

More specifically, **claims 18-22** have been amended to remove phrases objected to by the Board as new matter in **claims 14-17**. Therefore, all the claims now meet the statutory requirements of 35 U.S.C. §251 and 35 U.S.C. §112.

The Claims of the Present Reissue Application Distinguish Over the Cited References

As a brief review, the present application is directed to an MRI system including an NMR polarizing magnet.

Claim 18 calls for an MRI system having upper and lower horizontal poles defining a gap. Matsutani has upper and lower electromagnetic coils **19, 20**. Coil supports **21, 25** and gradient coils **39, 40** are associated with the two coils **19, 20**. The coil support structures **21, 25** permit the Matsutani coils **19, 20** to be easily moved.

Claim 18 further calls for a movable patient transport supporting a horizontal patient bed and passing across the lower magnet pole while interjecting the patient bed into the gap. The patient transport has a first position fully extended away from the polarizing

magnet and a second position in the gap. Column 3, lines 54-59 of the present reissue application state:

> In use of the apparatus the table portion **31** is slid out from the core arrangement from the side at which the platter **33** is mounted so as to move the platter **33** ... to a position in which it is wholly outside the core arrangement.

Therefore, the first position called for in **claim 18** finds support in the specification as being fully extended away from the polarizing magnet.

Matsutani suggests no such patient transport. Applicants acknowledge that the coils of Matsutani are readily moved both vertically and rotated about a post **24** to permit a technician to readily perform necessary procedures (see column 8, line 62 - column 9, line 4 of Matsutani). Furthermore, applicants acknowledge that it appears from the drawings (note FIGURE 1) that the magnets can also be shifted laterally. FIGURE 9 of Matsutani also suggests rather than shifting the coils laterally, the patient support can be shifted laterally and longitudinally. However, it will be noted that such movement is limited. More specifically, Matsutani fails to disclose, and is not concerned with, shifting the patient support and/or moving or rotating the magnets such that the patient support is fully extended away from the magnets, as called for in **claim 18**. Therefore, Matsutani neither provides the patient access nor a movable patient structure as described in **claim 18**.

LeVeen does not cure this shortcoming. LeVeen is directed to an electromagnetic cancer treatment device. Applicators **36**, **38** apply electromagnetic energy along a trajectory therebetween. This trajectory is selected such that it passes through a tumor **48**. In order to destroy the tumor and not all tissue along the trajectory, the

trajectory is moved such that the tumor is irradiated along the plurality of trajectories.

A scintillation camera **70** that monitors radiation, which is emitted from radioisotopes that are typically injected into the patient's blood, is disposed below the patient. A scintillation camera provides a projection image of the patient's circulatory system. When appropriate radioisotopes are selected, the radioisotope is absorbed strongly by the tumor to be irradiated. The scintillation camera image helps to select and maintain the trajectories between applicators **36, 38**.

The patient bed of LeVeen is adjustable. However, it is submitted this adjustment is merely for purposes of centering the tumor of a patient disposed on the bed over the scintillation camera. Like Matsutani, LeVeen also has limited movement of the patient bed such that the patient bed is always over the scintillation camera. Therefore, LeVeen does not provide a movable transport that has a first position extended away from the NMR polarizing magnet, as called for in **claim 18**.

Neither Matsutani nor LeVeen teaches or fairly suggests a movable patient transport that has a first position extended fully away from the magnet. Accordingly, it is submitted that **claim 18** and **claim 19**, dependent therefrom, distinguish patentably and unobviously over the references of record.

Independent **claim 20** calls for a method for positioning a patient for MRI using an NMR polarizing magnet with a C-shaped cross-section. The patient is placed on a movable bed while the bed is positioned completely away from the NMR polarizing magnet. The bed is moved above a floor towards the NMR polarizing magnet and into juxta-position with an open gap of the C-shaped

magnet. The bed is then moved across a lower pole face of the magnet and into the open gap thus leaving unobstructed adjacent access to the patient along an entire patient body side while the patient is disposed within the open gap.

As discussed above, although the bed or patient transport tables of Matsutani and LeVeen can be moved, neither Matsutani nor LeVeen is concerned with a movable bed capable of being positioned completely away from a magnet, as called for in independent **claim 20**. Therefore, **claim 20** is patentable over the combination of Matsutani and LeVeen.

Independent **claim 21** calls for an MRI system including an NMR polarizing magnet having a gap defined between opposed upper and lower horizontal poles. The gap is open on at least three sides. A movable patient transport supports a horizontal patient bed. The movable patient support passes across the lower pole while moving the patient bed into the gap, thereby permitting substantially adjacent patient access along a side of the patient while the patient transport is positioned in the imaging position and the patient is positioned within the MRI image volume. The patient bed moves between the imaging position and a displaced position displaced fully away from the upper and lower poles.

As discussed above, neither Matsutani nor LeVeen is concerned with a movable bed capable of being displaced fully away from a magnet, as called for in independent **claim 21**. Therefore, **claim 21** is patentable over the combination of Matsutani and LeVeen.

Independent **claim 22** calls for a method for positioning a patient for MRI using a magnet having a gap defined between opposed upper and lower horizontal poles. The patient is placed on a movable bed at a location

completely displaced from the upper and lower horizontal poles. The bed is moved into juxta-position with the open gap. The bed is then moved over a face of the lower pole and into the open gap, thus leaving unobstructed adjacent access to the patient along an entire patient body side while the patient is disposed in the open gap.

As discussed above, neither Matsutani nor LeVeen is concerned with a movable bed capable of being completely displaced from poles of a magnet, as called for in independent **claim 22**. Therefore, **claim 22** is patentable over the combination of Matsutani and LeVeen.

CONCLUSION

For the reason set forth above, it is requested that **claims 1-13 and 18-22** be allowed.

Respectfully submitted,

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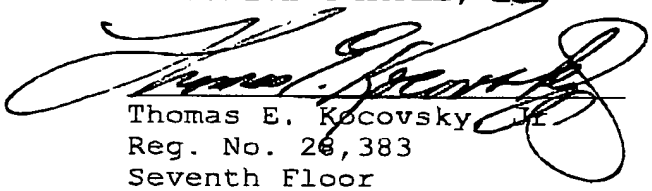

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